REMARKS/ARGUMENTS

The specification has been amended to correct minor grammatical errors and minor informalities. The specification has also been amended to clarify that, while Figures 5 and 6 represent reactor embodiments that were previously filed with the Japanese Patent Office, these embodiments were neither published nor patented before the priority date of the claims of the instant invention. No new matter has been added by the present amendment.

The drawings have been corrected in accordance with 37 C.F.R. § 1.85. Specifically, Figure 1 has been amended to add the character reference "WVG" that was previously omitted. Figure 7 has been labeled "Prior Art." The present changes to the drawings adds no new matter to the application.

Applicants note the Examiner's objection to Figures 5 and 6 on the grounds that these figures should be labeled "Prior Art" (Office Action, dated February 12, 2004, page 2, lines 13-14). Applicants disagree that the term "Prior Art" is applicable to the subject matter shown in Figures 5 and 6 of the present application. This material is prior work of the present inventor and assignee previously submitted to the Japanese Patent Office. However, this subject matter is not valid prior art against the instant claims under 35 U.S.C. § 102.

Subject matter shown in Figure 5 of the present application was filed with the Japanese Patent Office on December 4, 1998 as Application No. 10-345499, but was not published as Japanese Laid-Open Application No. 2000-169109 until June 20, 2000. These facts are supported by Exhibit A, attached herewith, which is a copy of the face of Japanese Laid-Open Application No. 2000-1691109 and a corresponding English Abstract downloaded from Delphion. Subject matter shown in Figure 6 of the present application was filed with the Japanese Patent Office on December 4, 1998 as Application No. 10-

345500, but was not published as Japanese Laid-Open Application No. 2000-169110 until June 20, 2000. These facts are supported by Exhibit B, attached herewith, which is a copy of the face of Japanese Laid-Open Application No. 2000-169110 and a corresponding English Abstract downloaded from Delphion. However, the presently claimed invention claims priority to Japanese Priority documents Nos. 11-223548 and 11-338882, which establish an earlier priority date in 1999. Therefore, while the subject matter shown in Figures 5 and 6 of the present application represents earlier developed reactors that were disclosed to the Japanese Patent Office, the subject matter of Figures 5 and 6 is not valid prior art because it was published after the priority date of the present invention. Upon request by the Examiner, Applicants will file a certified English translation of the Japanese priority documents Nos. 11-223548 and 11-338882 in order to perfect the priority claim of the present invention.

Claims 2-6 have been canceled without prejudice. Claim 1 has been amended and new claims 21-33 have been added. Claims 7-20 stand as withdrawn in view of the Examiner's restriction requirement.

Claim 1 has been amended to incorporate the subject matter of claims 2 and 3, and to add several elements. First, claim 1 now additionally recites that "the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature of not higher than 450°C" as supported on page 17, lines 1-4, of the instant specification; "the first reflector and the second reflector are identical flat plates symmetrically disposed in the interior space" as supported by Figure 8 and on page 10, lines 14-16, of the present application; and "a process chamber, wherein the reactor is connected to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as supported by Figure 1 and on page 10, lines 9-20, of the present application.

New claim 21 depends upon independent claim 1, and recites that the "first reflector and the second reflector each include a peripheral portion inclined in cross-section" as supported in Figure 5 of the instant application. New claim 22 depends upon claim 21, and recites an "internal pressure within the process chamber is 1-100 Torr" as supported by Figure 7 and page 11, lines 16-31, of the instant application.

New claim 23 incorporates the subject matter of claims 1, 2 and 5, and additionally recites that "the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature of not higher than 450°C" as supported on page 17, lines 1-4, of the instant specification; the "reflector is a thick plate" as supported by Figure 6 and on page 10, lines 14-16, of the present application; and "a process chamber, wherein the reactor is connected to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as supported by Figure 1 and on page 10, lines 9-20, of the present application.

New claim 24 depends upon independent claim 23, and recites that "the reflector includes a peripheral portion inclined in cross-section" as supported by Figure 6. New claim 25 depends upon claim 24 and recites that "internal pressure within the process chamber is 1-100 Torr" as supported by Figure 7 and page 11, lines 16-31, of the instant application.

New claim 26 incorporates subject matter from claims 1, 2, 3 and 5, and also recites that "the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature set in the range of 300°C to 450°C" as supported by Table 1 and on page 15, lines 6-9, and on page 17, lines 1-4, of the instant specification; and "a process chamber, wherein the reactor is connected to the process chamber, wherein the moisture gas fed into

the process chamber is reduced in pressure by the means for reducing pressure" as supported by Figure 1 and on page 10, lines 9-20, of the present application.

New claim 27 depends upon independent claim 26 and recites that "the first reflector is a thick plate that includes a peripheral portion inclined in cross-section" as shown in Figure 6 of the application. New claim 28 depends upon independent claim 26 and recites that the apparatus further comprises "a second reflector disposed in the internal space to face the moisture outlet passage, wherein the first reflector is disposed in the internal space to face the material gas supply passage, and the first reflector and the second reflector are identical flat plates symmetrically disposed in the interior space" as shown in Figure 8 of the application. New claim 29 depends upon claim 28 and recites that "the first reflector and the second reflector each include a peripheral portion inclined in cross-section" as shown in Figure 8.

New claim 30 depends upon claim 26 and recites "internal pressure within the process chamber is 1-100 Torr" as supported by Figure 7 and page 11, lines 16-31, of the instant application. New claim 31 depends upon independent claim 26 and recites that "the set catalytic reaction temperature is selected from the group consisting of 300°C, 350°C and 400°C" as supported by Table 1 and on page 3, lines 13-16, and page 10, lines 14-16, of the instant specification. New claim 32 depends upon independent claim 26 and recites "a temperature difference between the set temperature and an ignition point of hydrogen is set between 190°C and 230°C" as supported on page 6, lines 11-14, of the instant specification. New claim 33 depends upon claim 32 and recites that "the apparatus generates moisture at a rate of 2000 cc/minute" as supported on page 7, lines 9-11, of the instant specification.

The present amendment adds no new matter to the application.

The Invention

The present invention pertains generally to the field of generating and feeding water from a catalytic reaction involving hydrogen and oxygen, wherein the moisture generated is used in the production of semiconductors. More particularly, the present invention pertains to an apparatus for generating and feeding moisture that includes: (a) a reactor having an upstream gas inlet side, a downstream moisture outlet side and a catalyst for generating moisture from hydrogen and oxygen; (b) means for reducing pressure provided on the downstream side of the reactor, and disposed so that moisture leaving and fed from said reactor is reduced in pressure by the means for reducing pressure while an internal high pressure in the reactor is maintained, wherein the means for reducing pressure comprises one or more components selected from the group consisting of an orifice, a valve, a capillary and a filter; and (c) a process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure.

The various embodiments of the presently claimed invention share many advantages over the prior art moisture generating apparatuses. Specifically, having "means for reducing pressure," such as recited in claims 1, 23 and 26, on the downstream of the moisture outlet side of the reactor of an apparatus for generating and feeding moisture serves to maintain the internal pressure of the reactor for generating moisture while ensuring a reduced pressure of the moisture gas in the process chamber connected to the reactor. In this way, the apparatus, in accordance with the present invention, for

generating and feeding moisture can react hydrogen and oxygen in a reactor to generate water while obviating the risk that pressure drops due to moisture leaving the reactor will trigger an explosion. In addition, the flat plate geometry of one or more reflectors used in the invention provides an apparatus for generating and feeding moisture that can generate moisture at greater rates than if other conventional reflectors were used.

The Rejections

Claim 5 stands objected to for a minor informality.

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as anticipated by Ohmi et al. (EP 0 878 443, hereafter the Ohmi'443 Document). Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as anticipated by Minami et al. (WO 98/57884, hereafter the WO'884 Document). Claims 1-6 stand rejected under 35 U.S.C. § 102(e) as anticipated by Tanabe et al. (U.S. Patent 6,274,098 B1, hereafter the Tanabe'098 Patent). Claims 1-6 stand rejected under 35 U.S.C. § 102(e) as anticipated by Minami et al. (U.S. Patent 6,334,962 B1, hereafter the Minami'962 Patent). Claims 1-6 stand rejected under 35 U.S.C. § 102(e) as anticipated by Ohmi et al. (U.S. Patent 6,180,067 B1, hereafter the Ohmi'067 Patent). Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as anticipated by Henrie (U.S. Patent 3,755,075, hereafter the Henrie'075 Patent).

Applicants respectfully traverse the rejection and request reconsideration of the present application for the following reasons.

Applicants' Arguments

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). In the present case, the prior art of record fails to establish anticipation for the following reasons.

The Henrie'075 Patent

The Henrie'075 Patent teaches a "condenser-type gas combiner" wherein hydrogen and oxygen are recombined at low pressures using a condenser as a driving force to transport hydrogen and oxygen through a catalytic bed (See Abstract). While the Henrie'075 Patent teaches a catalyst-condenser zone (14) that includes a catalyst bed and a condenser (See Figure 1), this reference does not teach, or even suggest, a "reflector" as recited in independent claims 1, 23 and 26. Therefore, the present rejection of the claimed invention, based on applying the Henrie'075 Patent under 35 U.S.C. § 102(b), is untenable and should be withdrawn.

The Ohmi'443 Document

The Ohmi'443 Document teaches a "method for generating moisture, reactor for generating moisture, method for controlling temperature of reactor for generating moisture, and method for forming platinum-coated catalyst layer" wherein the temperature of the reactor for generating moisture is set at a high temperature when hydrogen is reacted with oxygen to generate moisture (See Abstract). The Ohmi'443 Document teaches a "gas

ignition temperature" of about 620°C for various hydrogen and oxygen mixtures (page 8, lines 55-57). The various embodiments of the reactor (1) are controlled to be 600°C at a maximum, or lower (page 8, line 58), although in the second reactor embodiment (21) taught by Ohmi in Figure 43, water generation is conducted at about 500°C (page 18, lines 54-57) and at 400°C using the water generating reactor of Figure 49 (page 22, line 58, to page 23, line 1).

The reactor embodiments (21) taught in Figures 43 and 49 include gas passage (24a) of the gas supply joint (24), moisture gas passage (25a) of the water and gas take-out joint (25), reactor body members (22), (23), two reflector plates (29a), and a platinum coating film (32) or (41). As shown in Figures 43 and 49, the reflector plates (29a) are hollow, convex structures having a peripheral wall (29d), a bottom surface (29c) and an open hole (29b). In addition, it is noted that the reactor (21) shown in Figure 43 includes a filter (30), (page 18, lines 45-46), and that the reactor (21) shown in Figure 49 includes a filter (30) as well (page 21, lines 31-35).

The Ohmi'443 Document also teaches a separate and distinct reactor embodiment (33) shown in Figure 44, which includes an unlabeled supply passage, an unlabeled take-out passage, a conical filter (35) that is inserted into a reactor body member (34a), and a platinum coating film (36), (page 18, line 58, to page 19, line 3).

In the Office Action dated February 12, 2004, the Examiner appears to argue that a combination of the reactor embodiment (33) and the reactor embodiment (21) is taught by the Ohmi'443 Document (See page 4, lines 3-9, directed to features of embodiments shown in Figures 44 and 45, and page 4, lines 10-21, directed to features of the reactor embodiment (21) shown in Figure 43). Applicants contend that disassembling and

reassembling various embodiments taught by a reference is not the grounds for a proper Section 102 rejection. Applicants remind the Examiner that a proper Section 102 rejection requires showing the presence in a single prior art reference of each and every element of the claimed invention, **arranged as in the claim**. Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). Applicants assert that disassembling and reassembling various embodiments in a manner not contemplated by the reference is not proper under Section 102 because the reference plainly does not teach each and every element **arranged as in the claim**.

For this reason alone, the Examiner' rejection of the present claims under 35 U.S.C. § 102(b) as anticipated by the Ohmi'443 Document is untenable and should be withdrawn. However, this is not the only deficiency. The Ohmi'443 Document does not teach, or even suggest, a "first reflector" and a "second reflector" that are "identical flat plates" as recited in claim 1; that "the first reflector and the second reflector each include a peripheral portion inclined in cross-section" as recited in claim 21; a "reflector" that is a "thick plate" as recited in claim 23; and a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26.

Furthermore, the Ohmi'443 Document fails to teach, or even suggest, that the "internal pressure within the process chamber is 1-100 Torr" as recited in claims 22, 25 and 26; wherein "a temperature difference between the set temperature and an ignition point of hydrogen is set between 190°C and 230°C" as recited in claim 32; and that the "apparatus generates moisture at a rate of 2000 cc/minute" as recited in claim 33.

The WO'884 Document

The WO'884 Document teaches a "method for generating water for semiconductor production" and is the priority document for U.S. Patent 6,093,662 to Ohmi et al. (hereafter, the Ohmi'662 Patent). Applicants assert that the concordance between the WO'884 Document and the Ohmi'662 Patent is sufficient to reasonably characterize the teachings of the WO'884 Document based on the teachings of the Ohmi'662 Patent. Therefore, Applicants will characterize the teachings of the Ohmi'662 Patent and assert that the WO'884 Document discloses the same subject matter as the Ohmi'662 Patent and shares the same deficiencies as the Ohmi'662 Patent.

The Ohmi'662 Patent also teaches a "method for generating water for semiconductor production." As shown in Figure 7, a reactor (1) is connected to semiconductor manufacturing facilities (SM), wherein a filter (F3) and a valve (V7) are disposed between the reactor (1) and the facilities (SM). The reactor (1) can generate approximately 1000 sccm of moisture (col. 7, lines 53-56) and operates at a reaction temperature of approximately 400°C (col. 2, lines 14-20).

In Figure 1, the Ohmi'662 Patent teaches that a reactor (1) can be connected to a moisture reservoir (R) and that a suction regulating valve (SV) connected to a pump (P) can be connected between the reactor (1) and the reservoir (R). In Figure 9, the Ohmi'662 Patent teaches that reactor (1) includes structural components (2), (3); inlet reflector unit (9) and outlet reflector unit (12) that are flat stainless disks having about the same diameter; a filter (10) and a platinum-coated layer (13), (col. 9, lines 56-64).

The Ohmi'662 Patent does not teach, or even suggest, a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26.

The Ohmi'662 Patent also does not teach, or even suggest, a "first reflector" and a "second reflector" that each include "a peripheral portion inclined in cross-section" as recited in claim 21; and a "reflector" that is a "thick plate" having a "peripheral portion inclined in cross-section" as recited in claim 24.

Furthermore, the Ohmi'662 Patent fails to teach, or even suggest, that the "internal pressure within the process chamber is 1-100 Torr" as recited in claims 22, 25 and 26; that "a temperature difference between the set temperature and an ignition point of hydrogen is set between 190°C and 230°C" as recited in claim 32; and that the "apparatus generates moisture at a rate of 2000 cc/minute" as recited in claim 33.

Applicants assert that the WO'884 Document is deficient for the same reasons as the Ohmi'662 Patent, and therefore cannot serve as a proper basis for a rejection of the present claims under 35 U.S.C. § 102.

The Tanabe'098 Patent

The Tanabe'098 Patent teaches an "apparatus for the treatment of exhaust gases by combining hydrogen and oxygen" as shown in Figure 1 wherein the apparatus (1) for the treatment of exhaust gases includes reactors (5) and (6). An exhaust gas (G) containing hydrogen is fed into the apparatus (1), and reactors (5) and (6), and allowed to react with

oxygen to become water (col. 4, lines 48-50). Meters (11), (12), drain reservoirs (9), (10), and drain valves (18), (19) are included in the apparatus (1).

Figure 2 of the Tanabe'098 Patent shows that reactors (5), (6) each includes reactor structural components (5b), (5d); gas feed port (5a); moisture gas take-out port (5c); an inlet reflector unit (5e), and outlet reflector unit (5f); and a diffusion filter (5g), (col. 4, lines 56-65). In Figure 2, the inlet reflector unit (5e) and outlet reflector unit (5f) are shown as hollow, convex structures having an open hole (unlabeled). The Tanabe'098 Patent also teaches that reactor (5) has a moisture generating capacity of 4000 cc/minute (col. 7, lines 39-41).

However, the Tanabe'098 Patent does not teach, or even suggest, a "first reflector" and a "second reflector" that are "identical flat plates" as recited in claim 1; that "the first reflector and the second reflector each include a peripheral portion inclined in cross-section" as recited in claim 21; a "reflector" that is a "thick plate" as recited in claim 23; a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26; and that "the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature set in the range of 300°C to 450°C" as recited in claims 1, 23 and 26.

Furthermore, the Tanabe'098 Patent fails to teach, or even suggest, that the "internal pressure within the process chamber is 1-100 Torr" as recited in claims 22, 25 and 26; and "a temperature difference between the set temperature and an ignition point of hydrogen is set between 190°C and 230°C" as recited in claim 32.

The Minami'962 Patent

The Minami'962 Patent teaches a "low flow rate moisture supply process" performed by a system diagramed in Figure 1. The system includes a reactor (1) for the generation of moisture that is connected to supply moisture to a semiconductor manufacturing facility (SM). A filter (F3) is connected between the reactor (1) and the facility (SM). As shown in Figure 7, the reactor (1) includes reactor structural components (2), (3); a gas supply joint (4); a moisture gas take-out joint (5); a reflector (9) on the inlet side; a reflector (12) on the outlet side; a filter (10); and a platinum-coated catalyst layer (13). This reactor (1) produces approximately 1000 sccm of moisture (col. 2, lines 6-12). As shown in Figure 7, the reflectors (9) and (12) are hollow, convex structures having an open hole (unlabeled).

The Minami'962 Patent does not teach, or even suggest, a "first reflector" and a "second reflector" that are "identical flat plates" as recited in claim 1; that "the first reflector and the second reflector each include a peripheral portion inclined in cross-section" as recited in claim 21; a "reflector" that is a "thick plate" as recited in claim 23; a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26; and that "the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature set in the range of 300°C to 450°C" as recited in claims 1, 23 and 26.

Furthermore, the Minami'962 Patent fails to teach, or even suggest, that the "internal pressure within the process chamber is 1-100 Torr" as recited in claims 22, 25 and 26; "a temperature difference between the set temperature and an ignition point of

hydrogen is set between 190°C and 230°C" as recited in claim 32; and that the "apparatus generates moisture at a rate of 2000 cc/minute" as recited in claim 33.

The Ohmi'067 Patent

The Ohmi'067 Patent teaches a "reactor for the generation of water" wherein various reactor embodiments are shown in Figures 1, 5, 8, 11 and 13. Figures 8 and 11 appears to show the most germane embodiments of reactor (1). The reactor (1) embodiments shown in Figures 8 and 11 include reactor structural components (2), (3); a gas feed passage (4a); a water vapor outlet passage (5a); inlet and outlet reflector units (9) and (12); diffusion filter (10); and a platinum coated catalyst layer (13). The reflector units (9), (12), as shown in Figures 8 through 11, are circular disks having formed legs (9d), (12a) on the periphery of the disk so as to form narrow gaps (F), (G) when assembled (col. 11, lines 55-63). The Ohmi'067 Patent also teaches that prior art reactors can produce more than 1000 sccm of water vapor when the reactor shell is less than some 400°C (col. 1, line 61, to col. 2, line 6).

However, the Ohmi'067 Patent does not teach, or even suggest, a "first reflector" and a "second reflector" that are "identical flat plates" as recited in claim 1; that "the first reflector and the second reflector each include a peripheral portion inclined in cross-section" as recited in claim 21; a "reflector" that is a "thick plate" as recited in claim 23; a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26; and that "the reactor generates moisture from hydrogen and oxygen by catalytic reaction at a temperature set in the range of 300°C to 450°C" as recited in claims 1, 23 and 26.

Furthermore, the Ohmi'067 Patent fails to teach, or even suggest, that the "internal pressure within the process chamber is 1-100 Torr" as recited in claims 22, 25 and 26; "a temperature difference between the set temperature and an ignition point of hydrogen is set between 190°C and 230°C" as recited in claim 32; and that the "apparatus generates moisture at a rate of 2000 cc/minute" as recited in claim 33.

Thus, none of the prior art cited against the instant claims can properly anticipate the claimed invention because none of these references by itself discloses each and every element of the claimed invention, arranged as in the claim. Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick, 221 U.S.P.Q. at 485.

Furthermore, no combination of the prior art references described above can render the subject matter of the claims obvious because all of these prior art references fail to teach, or even suggest, the following claimed features: (a) a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26; (b) that "the first reflector and the second reflector each include a peripheral portion inclined in cross-section" as recited in claim 21; and (c) a "reflector" that is a "thick plate" as recited in claim 23.

Furthermore, the prior art described above fails to teach, or even suggest, (d) that the "internal pressure within the process chamber is 1-100 Torr" as recited in claims 22, 25 and 26; and (e) "a temperature difference between the set temperature and an ignition point of hydrogen is set between 190°C and 230°C" as recited in claim 32.

Additional Comments

The present invention was inspired when the inventors noticed that as the internal pressure in the reactor for generating moisture drops, the likelihood of an explosion increases given the volatile nature of oxygen and hydrogen gas mixtures. In order to prevent explosion, inventors conceived of the idea of providing a "means for reducing pressure," such as recited in claims 1, 23 and 26, downstream of the moisture outlet side of the reactor, thereby maintaining the internal pressure of the reactor for generating moisture while ensuring a reduced pressure of the moisture gas in a process chamber. Specifically, claims 1, 23 and 26 each recite

> "means for reducing pressure provided on the downstream side of the reactor, and disposed so that moisture leaving and fed from said reactor is reduced in pressure by the means for reducing pressure while an internal high pressure in the reactor is maintained,...wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure."

This claimed feature of the present invention is neither taught, nor reasonably suggested, by the teachings of the prior art.

Furthermore, the filters, valves and draining tanks taught by the prior art references are intended, as would be recognized by a person of ordinary skill in the art, for removing dust, for regulating the flow rate of the moisture gas, and for removing moisture. None of the prior art references teach, or even suggest, that the "means for reducing pressure" both (1) maintains "an internal high pressure in the reactor" and (2) reduces the pressure in moisture leaving the reactor so that "the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26.

Conclusion

None of the prior art references discussed above, either singly or in combination, can either anticipate or render obvious the subject matter of the claims because none of the references teaches, or even suggests, a "process chamber, wherein the reactor is connected to feed moisture gas to the process chamber, wherein the moisture gas fed into the process chamber is reduced in pressure by the means for reducing pressure" as recited in claims 1, 23 and 26. Consequently, the present rejections standing against the claims are untenable and should be withdrawn.

For all of the above reasons, claims 1 and 21-33 are in condition for allowance, and a prompt notice of allowance is earnestly solicited.

Questions are welcomed by the below signed attorney of record for the Applicants.

Respectfully submitted,

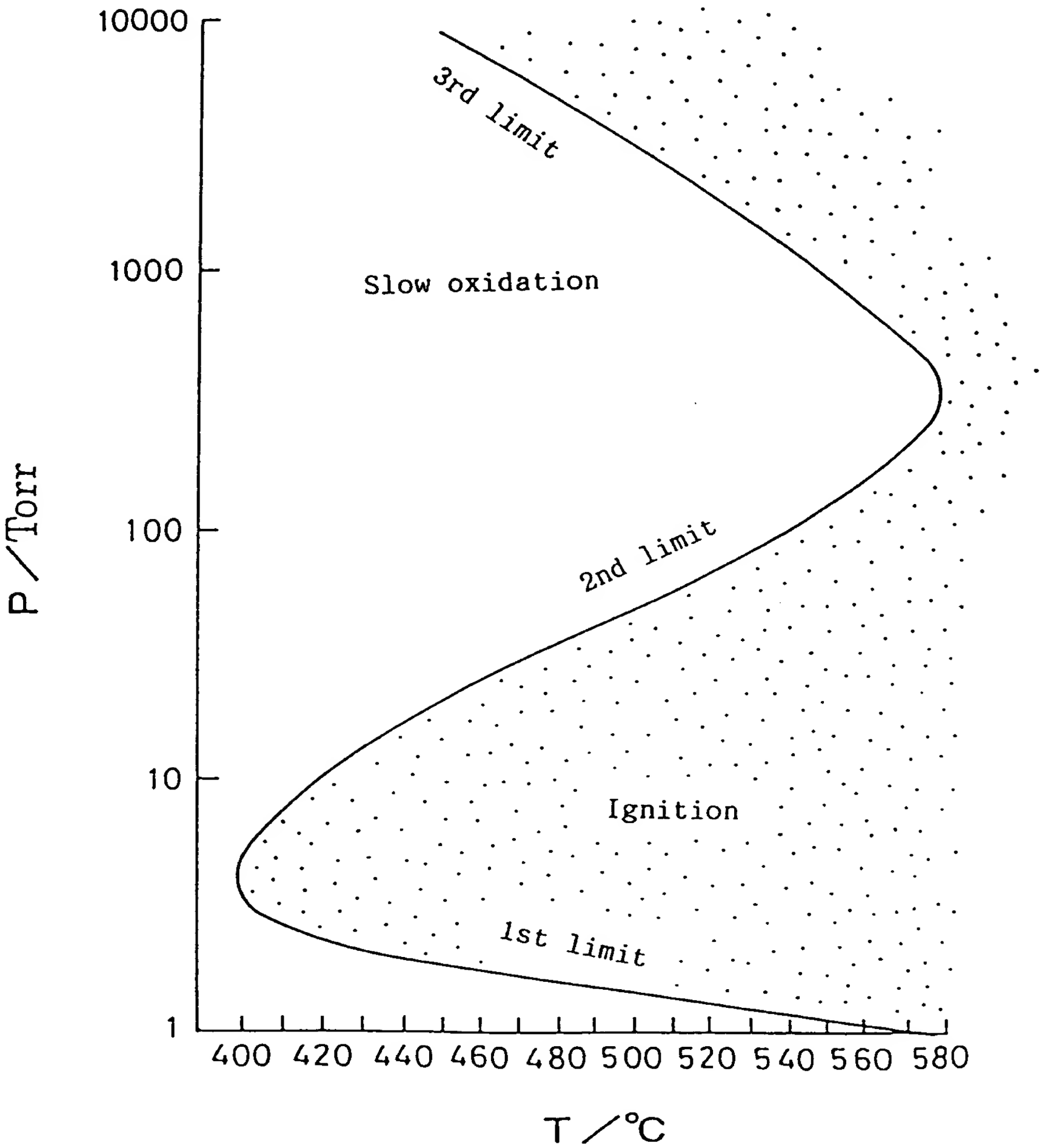
GRIFFIN & SZIPL, PC

Joerg-Uwe Szipl
Reg. No. 31,799

GRIFFIN & SZIPL, PC
Suite PH-1
2300 Ninth Street, South
Arlington, VA 22204
Telephone: (703) 979-5700
Facsimile: (703) 979-7429
Customer No.: 24203

ANNOTATED MARKED-UP DRAWINGS

FIG. 7

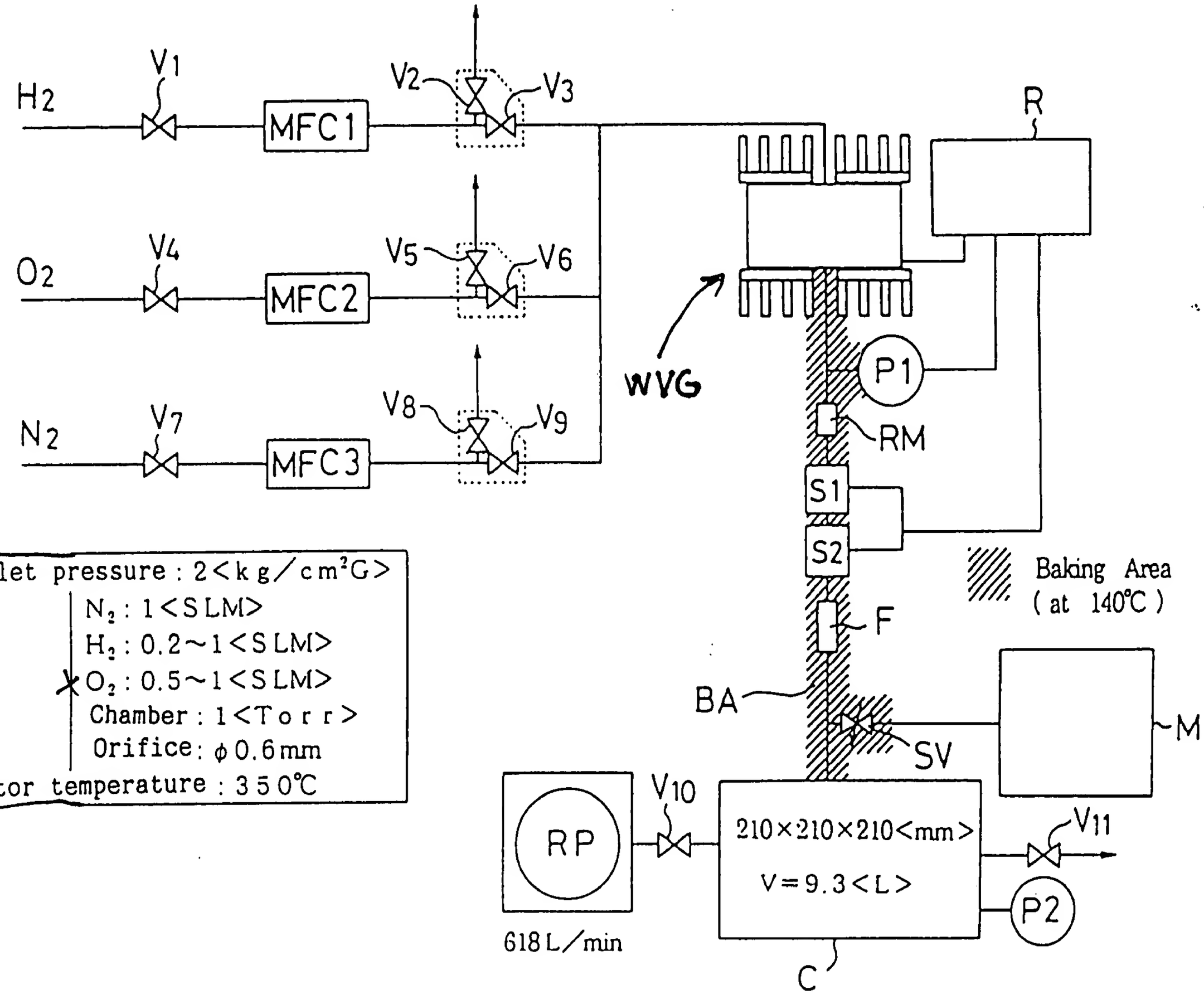


Prior Art

ANNOTATED MARKED-UP DRAWINGS

0 1 / 1

FIG. 1



Inlet pressure : 2<kg/cm²G>
N_2 : 1<SLM>
H_2 : 0.2～1<SLM>
O_2 : 0.5～1<SLM>
Chamber : 1<Torr>
Orifice : φ0.6mm
Reactor temperature : 350℃